SUPPLEMENT

Perspectives in NHS management

Doctors have management responsibilities too

DAVID S GRIMES

Management is entering into the work of clinicians and is threatening to take up an increasing amount of their time. The cause is obvious. In an era of government cash limits over-spending of district funds is illegal. Doctors control most clinical activity, which consumes virtually all the cash allocation of a district, so the pressure is on them to work "economically" and "responsibly." But what does this mean?

The doctor's first responsibility is to his patients. He or she is trained to do the best for each individual patient, an ethos that applies whether he is in a clinical specialty with direct patient contact or in a service specialty such as histopathology. Excellence is the ground rule for the medical profession, and the royal colleges oversee this aim by insisting on exacting standards so that consultants are of high calibre at the time of appointment.

The doctor's second responsibility is to organise a service, thereby extending his activity from the individual patient to a group of patients. The service may be of a technological nature—for instance a laboratory or a fiberoptic endoscopy service—or it may be more clinically oriented—for example, a general practice, a diabetic clinic, or a geriatric day hospital. In providing the service a doctor soon realises that a queue of people await his expertise, and he will usually strive to meet this demand. A trade off will, however, be reached when in order to preserve a certain quality of care to individual patients he must restrict the number that he sees. As doctors are generally unable to control demand any restriction will soon produce a waiting list.

The third major responsibility of a doctor is to educate the staff around him. Finally, the medical profession as a whole has a responsibility to ensure the overall function of the health care industry—however organised—and to fulfil this some doctors will need to sit on committees. These may be local committees at unit and district level or perhaps regional and national committees. Support for the royal colleges is also part of this responsibility.

Avoiding waste

It is as important in the National Health Service as in any other organisation that waste is avoided, and a doctor has a responsibility in the way that he uses the resources that are allocated to him. Professor Hampton suggested that "if we do not have the resources to do all that is technically possible then medical care must be limited to what is of proven value."¹ This sounds right, and British medicine has a good tradition of

controlled clinical trials to try to identify those potential treatments that are effective and those that are not. Unfortunately, treatments of proved effectiveness are not being provided to a significant number of potential patients yet we continue to use hospital beds to provide treatments that are not of proved value. One of the most expensive treatments provided by the NHS is inpatient care for patients suffering from stroke and many of these patients will spend between two and six months in an acute medical ward. The cost then becomes similar to that of a heart transplant. Most districts now have psychogeriatric units, but has the value of these been proved? The development of these units has been quite correct in that it leads to elderly disturbed patients being treated in a humane way, but does this count as treatment of proved value? It is a response to a demand from society as a whole expressed through the press and ultimately through parliament, but the debates did not discuss effectiveness or value for money. The decision to build psychogeriatric units was ethical or political rather than managerial, and management groups are increasingly expected to make such ethical judgments in allocating restricted resources.

A treatment will frequently be given to a patient when it is only with hindsight that its effectiveness is known. It has been proved statistically that certain beta blocking drugs prevent death after myocardial infarction. In a Norwegian trial the mortality in a group treated with timolol was 8% at two years against 15% in the control group.² This means that out of every 100 patients treated only seven will benefit, but there is no way of recognising them in advance. It also means that the treatment will be ineffective for the 93 other patients treated and this represents wasted resources. It might be questioned whether the adoption of this treatment is managerially correct or whether it is a misuse of resources. But a study of this type is unlikely to come to the attention of a formal management group, and the decision to prescribe the treatment will be made by each doctor. This is a perfect example of what Rudolf Klein called the "law of inverse decision making," when not only the ability to make decisions but also the expert knowledge lies with the "workers" rather than with the management.³ But in this particular example if we look beyond waste it can be calculated that the cost per life saved (drug cost for 100 patients for two years divided by seven) is approximately £1500, which is extremely good value for money if a patient survives for, say, 10 years.

This form of waste is similar to that of fire alarms. Over the next few decades only a small proportion of recently installed fire alarms will be used, but there is no way of predicting in advance which these will be. We therefore install far more fire alarms than will be needed and the vast majority will turn out to be unused and therefore ineffective. Taking the parallel further, it has been calculated that to save one life from fire in the NHS costs £63m. If a health authority decides that fire

prevention is not cost effective and declines to install the recommended systems then any future death from fire would clearly result in legal action against that authority by the relatives of the deceased. The legal responsibility of a health authority to the safety of patients is in this respect not dissimilar from a doctor's responsibility to his patients in terms of their treatment.

It is relatively easy to calculate the cost of successful treatment but assessing the "value" of diagnostic procedures is less straightforward. Some interesting observations may, however, still be made. A study published in 1983 looked at the value of computed tomography in investigating dementia.⁴ The most important diagnosis being looked for was a subdural haematoma and four were diagnosed in 500 consecutive patients. Three of these patients were successfully treated. If we accept that a computed tomography scan costs £100 and that therefore the total cost of investigation was £50 000 it can be seen that the cost of one successful treatment was £17 000. Whether or not this was good value for money depends on how long a successfully treated patient survives with cerebral function close enough to normal for him to enjoy his remaining life. Even if this investigation were thought by a health authority to be good value for money the problem would clearly lie in finding the money to pay for computed tomography for all demented patients with reasonably good physical health.

One of the most valuable resources in the NHS is consultant time, and it must be used carefully so as to obtain maximum benefit for the NHS. A consultant usually has all his sessional commitments devoted to patient care, and if he is diverted from this patients are not treated. Committee attendance is an example, and a consultant might be forgiven for asking himself if the time spent there has a more useful output than seeing patients. Experience tells him that this is rarely the case and many committees, especially when concerned with planning, seem to be a waste of time, with no obvious outcome. If the government wishes to increase the number of patients treated with existing staffing levels the time that clinicians spend in committees and on administrative work must be reduced to the minimum. If it wishes to bring doctors further into management their number must be increased; otherwise patients will be neglected. Management has its cost.

Efficiency

The efficiency of the NHS has increased remarkably over the past two decades and more patients have been treated in fewer beds.⁵ Patients who have had a myocardial infarction are now kept in hospital for one week, whereas 20 years ago they would have been inpatients for four to six weeks. This change in treatment has been studied closely and shown to carry no cost of mortality or morbidity, and changes in treatment should be evaluated in this way.^{6 7} More operations are being performed on a short stay basis and new technology has greatly helped this trend. For example, common bile duct stones can now be removed endoscopically in outpatients using many fewer resources than an open operation necessitating around 10 days in hospital. Long stay psychiatric hospitals had their bed allocations reduced drastically and many of their patients have been discharged into the community. There are doubts, however, about the clinical and social effectiveness of this particular change in policy, and studies of the long term effects on patients have yet to be performed.

Efficiency may also be evaluated in the outpatient clinic, when again the consultant has the responsibility to avoid wasting resources, in this case outpatient time. If I increase the number of patients I see in a medical clinic from, say, 15 to 30 I am doubling the efficiency of my work. (Efficiency is a mechanical concept: it is work done divided by resources used. The efficiency of a car engine is assessed by miles per gallon; efficiency of the NHS is assessed by patients per bed, per nurse, per doctor, per session, etc.) Unfortunately, increasing the

number of patients seen in this way as part of improving efficiency will reduce by half the time the doctor can allocate to each patient. This may not be detrimental to mortality or even morbidity but it is likely to reduce the patient's satisfaction. In a private session a consultant is likely to see no more than six patients, indicating an extremely low level of efficiency but arguably a higher level of effectiveness. Health service statistics tell us something about mortality, a little about morbidity, but nothing whatsoever about satisfaction. A patient who visits his doctor does not usually expect to have his life saved. He hopes that his symptoms will be alleviated, would like an explanation of the nature of his illness, and expects a prognosis. The success of this process is not measured.

While a doctor has a responsibility to work efficiently, treating as many patients as possible with the allocated resources, this must not be at the expense of a lowered quality of care. Furthermore, it is unrealistic for a doctor to work to a norm of patients seen, for doctors differ in their communication skills. Finally, it is hazardous to portray the most efficient doctor as the "regional objective." A doctor might see 80 patients in an outpatient session, but it is hard to imagine him providing good quality care, even though an administrator might judge him to be extremely "efficient."

Conflict between doctors and management

The doctor must ask himself if he is providing effective, efficient treatment. But what does he do if he fulfils these criteria and finds that the resources he is allocated are inadequate to provide such a service to all his patients? The doctor will clearly feel a responsibility to those patients who are left on the waiting list and who either go without treatment or wait a long time for it. He has, however, only a moral responsibility to them: a doctor is not liable in law for patients on his waiting list. The legal responsibility of a doctor is to the quality of his work, whereas the health authorities are more concerned with quantity. It is particularly in this area that conflict will arise between doctors and management. The doctor is likely to continue to treat patients, even though the allocated resources have been exhausted, and even though the budget of the district or unit is likely to be overspent. Most doctors will think that their responsibilities are to the care of patients rather than to a budget, which is seen to be a thinly disguised government policy. Britain has a long tradition of doctors whose clinical work is independent of government and this is a great strength. The treatment of individual patients has never been interfered with by the government, but what should a doctor do if government policy attempts to prevent him from treating patients either directly or indirectly?⁸ Professor Cameron and his colleagues put the dilemma forcibly: "Should a doctor ever allow a patient to die because he is ordered to do so by a representative of the state?"⁹

Our arrangement of health service funding is ideally suited to an organisation that does not change. It is unsuited to present day medicine with constant change and new advances occurring each year. New treatments are becoming available and so in 1985 we can expect to identify a group of patients for whom there will be an effective treatment that is not available in 1984. Similarly, timolol has been shown recently to be effective in preventing death from myocardial infarction. The acceptance of this as a treatment policy would add about £10 000 a year to the district budget, and though most of this would be paid for out of family practitioner committee funds, it will be taken out of the budget for the hospital service.¹⁰ The doctor's responsibility is clearly to provide this treatment, which is of proved effectiveness and seems to be good value for money.

If the health service is to treat more patients each year then it is a growing industry but unfortunately one without a growing workforce and with little prospect of automation. There are

continued on page 392

General Practice Finance Corporation lends more money

The General Practice Finance Corporation's annual report for 1983-4 (HMSO, price £3.60) shows a rising demand for loans from NHS general practitioners wishing to buy or improve surgery premises. During the financial year the corporation made 197 loans to 436 doctors totalling £12 217 000, compared with 114 loans to 256 doctors amounting to £6 117 000 in the previous financial year. This substantial increase in lending, the corporation comments, reflects in part the improving standard of surgery premises. Since its inception in 1967 the corporation has made loans to 7064 doctors in Great Britain totalling £59.6 million. The government increased its borrowing limit to £75m on 15 June 1981 and subsequently raised it to £100m on 17 April 1984. The report also shows a steadily increasing number of doctors taking advantage of the corporation's scheme for the purchase and

leaseback of premises required for surgeries, which was introduced in 1981. The corporation is chaired by Mr D L Stebbings and among its members are Dr R A Arthur, Dr J A Riddell, and Dr D M Wilks. During the year the corporation's senior management visited 71 practices which were considering the provision of new or newly adapted premises.

1984. In the event of an election senior hospital staff of the specialty in the regions will be issued with voting papers.

J D J HAVARD
Secretary

Armed forces committee

Nominations are sought for cooption to the BMA's armed forces committee of two representatives, one of whom should preferably be of specialist status, from the medical branch of each of the services, each representative being of the rank of major, lieutenant commander, squadron leader, or below, as the case may be.

The committee meets three or four times annually and is responsible for representing the interests of doctors serving in the armed forces and for submitting evidence on their behalf to the Armed Forces Pay Review Body. If you are interested in cooption to the armed forces committee please write including full details of your rank and medical position to: the Secretary, BMA House, Tavistock Square, London WC1H 9JP.

J D J HAVARD,
Secretary

ASSOCIATION NOTICES

Thoracic medicine subcommittee (CCHMS)

A vacancy has arisen on the thoracic medicine subcommittee as a result of the retirement from the Northern Ireland and West Midlands regional grouping. Nominations are invited from senior hospital staff for a representative to serve on the subcommittee for the period 1984-7. Nomination forms are available from the undersigned and should be returned to BMA House, Tavistock Square, London WC1H 9JP not later than Friday 31 August

Perspectives in NHS Management—continued from page 391

limits to how far the redistribution of existing NHS resources will enable the health care needs of the population to be met, and the only way in which the funding of the NHS can be increased is by direct pressure on the government. This seems in practice to be the responsibility of the medical profession alone, and the BMA¹¹ and the royal colleges¹² have recently spoken out in this way. The press also has an important role in identifying and publicising the NHS's shortcomings and there are many examples of its success, especially with long stay hospitals and more recently with bone marrow transplantation. This is in marked contrast to health authorities and their chairmen, who seem (at least in public) to be representatives of government policy rather than representatives of patients. Nevertheless, change is in the air. In May 1984 the National Association of Health Authorities published a report highly critical of the government's level of funding of the NHS. I believe that full time managers of the NHS hold similar views to those of doctors, but to protest against government policy might result in disciplinary action, an example of the value of doctors' independence.

Conflict will inevitably increase over the next few years. Greater efficiency will almost certainly become widespread, but it will result in more work being undertaken and more patients treated. Increasing throughput will reduce the cost per patient, but unless there is strict rationing of treatment then the fact that more patients are being treated will mean a greater total cost and a greater threat on the district or unit budget. Gastroenterology is an example. In my hospital the number of endoscopy procedures has increased from 160 in 1971 to 1850 in 1983 and is likely to reach 2000 this year. At 1983 prices the cost of a gastroscopy (staff plus equipment) has fallen from £220 to £18 during the same period, but the total cost of the service has risen to about £40 000 a year and it is this that affects the district budget. The expensive clinical departments are usually the efficient ones, and whereas in the past certain low spending departments or districts could be relied on to balance the budget, this will not be possible in the future if their workload increases.

The levels of productivity and efficiency of the NHS compare favourably with the health care industries of other countries. An example of this is the drugs used per head of population

Pharmaceutical consumption per head of population

Country	\$	Country	\$
Switzerland	160	Austria	70
West Germany	158	Norway	62
France	122	Italy	59
Japan	120	Netherlands	43
Belgium	115	Finland	42
United States of America	90	United Kingdom	40
Denmark	88	Ireland	22
Sweden	86	Portugal	18

Source: Office of Health Economics, 1982.

(table). Only Ireland and Portugal are more efficient than the United Kingdom, whereas Germany and Switzerland are four times less efficient (whether their large pharmaceutical industries are a cause or a consequence of this is hard to judge). When the government acknowledges our present level of efficiency and when health authorities show active concern about quality and the plight of untreated patients then they might expect more cooperation from doctors. Management in medicine must not be seen merely as bringing doctors to heel: doctors who participate in management expect it to improve the care of their patients.

References

- Hampton JR. The end of clinical freedom. *Br Med J* 1983;287:1237-8.
- Norwegian Multicentre Study Group. Timolol-induced reduction in mortality and reinfarction in patients surviving acute myocardial infarction. *N Engl J Med* 1981;304:801-7.
- Klein R. Who makes the decisions in the NHS? *Br Med J* 1984;288:1706-8.
- Bradshaw JR, Thompson JLG, Campbell MJ. Computed tomography in the investigation of dementia. *Br Med J* 1983;286:277-80.
- Department of Health and Social Security. *Health care and its costs*. London: DHSS, 1983.
- Gelson ADN, Carson PHM, Tucker HH, Phillips R, Clarke M, Oakley GDG. Course of patients discharged early after myocardial infarction. *Br Med J* 1976;ii:1555-8.
- McNeer JF, Wagner GS, Ginsburg PB, et al. Hospital discharge one week after acute myocardial infarction. *N Engl J Med* 1978;298:229-32.
- Michael J, Adu D. Dialysis, cuts, and district policy. *Lancet* 1982;ii:990.
- Cameron JS, Ogg CS, Williams DG. Treatment for renal failure in the West Midlands. *Lancet* 1982;ii:1163.
- Greenshields G. Learning to live with cash limits—and other financial matters. *Br Med J* 1984;288:1393-5.
- Anonymous. Increasing concern on NHS deficiencies *Br Med J* 1984;289:142.
- Feroze R, Campbell D, Duckworth R, et al. Economies in the NHS. *The Times* 1984 March 21.15.

This is the last in the series of articles on NHS administration and management, which started on 28 April.